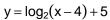
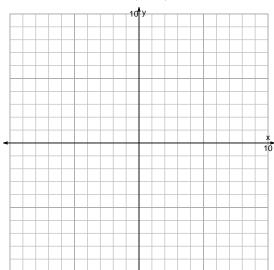
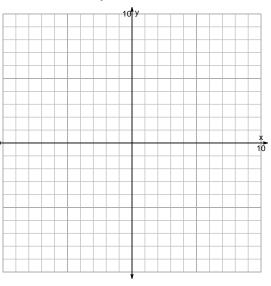
s18quiz: EXP LOG (QUIZ v204)

1. Graph $y = \log_2(x-4) + 5$ and $y = 2^{x-5} + 6$ on the grids below. Also, draw any asymptotes with dotted lines.





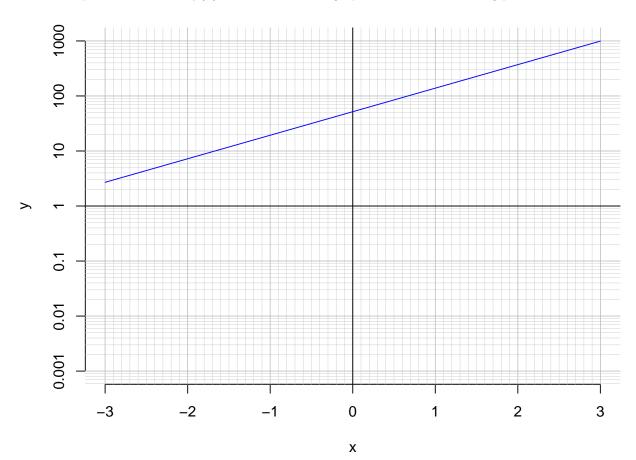
$$y = 2^{x-5} + 6$$



2. Write (but do not evaluate) the solution to the equation below by writing a logarithmic expression.

$$-29 = \left(\frac{-3}{7}\right) \cdot 2^{-5t/4}$$

3. An exponential function $f(x) = 51.8 \cdot e^{0.985x}$ is graphed below on a semi-log plot.



a. Using the plot above, evaluate f(2.9).

- b. Express $f^{-1}(x)$, the inverse of f.
- c. Using the plot above, evaluate $f^{-1}(4)$.